

IN THE CLAIMS:

Please AMEND claims 1, 10, 19, 24-25, 28, 31-32, and 38 as follows.

1. (Currently Amended) A noise reduction circuit, the noise reduction circuit comprising:

a filter coupled to a gate of a current source for an ~~oscillating circuit~~oscillator circuit to filter a bias noise component into the gate; and

a degeneration circuit coupled to a supply for the current source, wherein the degeneration circuit reduces a gain within the current source.

2. (Original) The circuit of claim 1, wherein the filter comprises a resistance.

3. (Original) The circuit of claim 1, wherein the filter comprises a capacitance.

4. (Original) The circuit of claim 1, wherein the current source comprises a diode.

5. (Original) The circuit of claim 1, wherein the current source comprises a p-channel metal oxide semiconductor.

6. (Original) The circuit of claim 1, wherein the degeneration circuit comprises a resistance.

7. (Original) The circuit of claim 1, wherein the filter comprises a low pass filter.
8. (Original) The circuit of claim 7, wherein the filter is coupled to a current mirror circuit to generate a bias current comprising the bias noise component.
9. (Original) The circuit of claim 7, wherein the degeneration circuit reduces a supply noise component.
10. (Currently Amended) A system for reducing noise in an ~~oscillating circuit~~oscillator circuit, the system comprising:
a filtering device having a first resistance and a capacitance to filter a bias current and coupled to a gate of a current source; and
a degeneration device having a second resistance to reduce a noise component in a supply current at the current source.
11. (Original) The system of claim 10, further comprising a band gap reference circuit to generate the bias current.
12. (Original) The system of claim 10, further comprising a power supply to generate the supply current.

13. (Original) The system of claim 10, wherein the second resistance comprises a resistor.

14. (Original) The system of claim 10, wherein the filtering device comprises a low pass filter.

15. (Original) The system of claim 14, wherein the low pass filter comprises a resistor.

16. (Original) The system of claim 14, wherein the low pass filter comprises a capacitor.

17. (Original) The system of claim 10, wherein the current source comprises diode.

18. (Original) The system of claim 17, wherein the first semiconductor type comprises a p-channel metal oxide semiconductor.

19. (Currently Amended) A method for reducing noise, the method comprising:

filtering a bias noise component from a bias current flowing into a gate of a current source for an ~~oscillating circuit~~ oscillator circuit; and

reducing a supply noise component from a supply current flowing into a supply of the current source.

20. (Original) The method of claim 19, wherein the filtering step comprises filtering the bias current using a low pass filter.

21. (Original) The method of claim 19, wherein the reducing step comprises reducing the supply noise component using a degeneration circuit.

22. (Original) The method of claim 19, further comprising reducing a gain of the current source.

23. (Original) The method claim 19, further comprising impeding a signal from the supply of the current source using a degeneration circuit.

24. (Currently Amended) A method for reducing noise components, the method comprising:

reducing a bias noise component by passing a bias current through a noise reduction circuit coupled to a gate of a current source to an ~~oscillating circuit~~oscillator circuit; and

reducing a supply noise component by passing a supply current through the noise reduction circuit coupled to a supply of the current source.

25. (Currently Amended) The method of claim 24, further comprising generating an input current by the current source to control the ~~oscillating circuit~~oscillator circuit.

26. (Original) The method of claim 24, wherein the first reducing step comprises reducing the bias noise component by filtering the bias current with a filter within the noise reduction circuit.

27. (Original) The method of claim 24, wherein the second reducing step comprises reducing the supply noise component by passing the supply current through a degeneration circuit within the noise reduction circuit.

28. (Currently Amended) A circuit comprising:
an ~~oscillating circuit~~oscillator circuit to generate an output signal;

a current source to control the ~~oscillating circuit~~oscillator circuit, wherein the current source receives a signal derived from a reference signal to generate the output signal; and

a noise reduction circuit coupled to a gate and a supply of the current source to reduce a noise component within the signal.

29. (Original) The circuit of claim 28, wherein the noise reduction circuit comprises a filter coupled to the gate.

30. (Original) The circuit of claim 28, wherein the noise reduction circuit comprises a degeneration circuit coupled to the supply.

31. (Currently Amended) A circuit for reducing noise, the circuit comprising:

filtering means for filtering a bias noise component from a bias current flowing into a gate of a current source for an ~~oscillating circuit~~oscillator circuit; and

reducing means for reducing a supply noise component from a supply current flowing into a supply of the current source.

32. (Currently Amended) A circuit for reducing noise components, the circuit comprising:

first reducing means for reducing a bias noise component by passing a bias current through a noise reduction circuit coupled to a gate of a current source to an oscillating circuit; and

second reducing means for reducing a supply noise component by passing a supply current through the noise reduction circuit coupled to a supply of the current source.

33. (Previously Presented) The circuit of claim 1, further comprising:

a bias current source for supplying bias current to the gate of the current source;

and

a bandgap reference coupled to a gate of the bias current source.

34. (Previously Presented) The circuit of claim 33, wherein the bandgap reference is directly coupled to the gate of the bias current source.

35. (Previously Presented) The circuit of claim 1, further comprising:

a bias current source for supplying bias current to the gate of the current source, wherein the bias current source comprises a diode.

36. (Previously Presented) The circuit of claim 1, wherein the current source comprises a predetermined capacitance.

37. (Previously Presented) The circuit of claim 36, wherein the predetermined capacitance is a function of voltage.

38. (Currently Amended) An ~~oscillating circuit~~oscillator circuit current source, comprising:

a filter, configured to filter a substantial amount of noise in a bias current, coupled to a gate of a current source for an ~~oscillating circuit~~oscillator circuit; and

a degeneration circuit coupled to a supply for the current source, wherein the degeneration circuit reduces a gain within the current source.